

WHAT IS CLAIMED IS:

1. An optical pick-up actuator, comprising:

a blade having an object lens at its top center for  
5 focusing light, said blade also having a drive coil unit around  
its outside surface and a plurality of magnet seating holes on  
opposite sides of its lower surface;

a tilting magnet held in each of said magnet seating holes  
of the blade;

10 a plurality of suspension wires allowing a current to flow  
therethrough and supporting said blade;

a wire holder supporting one end of each of said  
suspension wires;

a side yoke provided at a position vertically aligned with  
15 each of the tilting magnets held in the magnet seating holes of  
the blade;

a tilting coil held on said side yoke and  
electromagnetically tilting the blade at a desired angle  
relative to a perpendicular optical path of the object lens;

20 a drive magnet forming a magnetic field in the drive coil  
unit of the blade;

internal and external yokes holding said drive magnet and  
determining a range of the magnetic field formed in the drive  
coil unit, said internal and external yokes being integrated  
25 into a single structure; and

a yoke plate having a beam passing hole at its central area aligned with the optical path of said object lens, thus allowing a light beam from the object lens to pass through, said yoke plate also holding said wire holder thereon.

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2. The optical pick-up actuator according to claim 1, wherein said magnet seating holes are formed on the lower surface of the blade at positions which are symmetrical around the perpendicular optical path of the object lens.

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3. The optical pick-up actuator according to claim 1, wherein said magnet seating holes are formed on the lower surface of the blade at positions which are symmetrical around a tilting axis of the blade.

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4. The optical pick-up actuator according to claim 1, wherein said tilting magnets of the blade and said tilting coils of the side yokes are operated under the control of a solenoid.

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5. The optical pick-up actuator according to claim 1, wherein each of said side yokes is a pin type yoke which has a predetermined length and is mounted to a top surface of the yoke plate.

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